

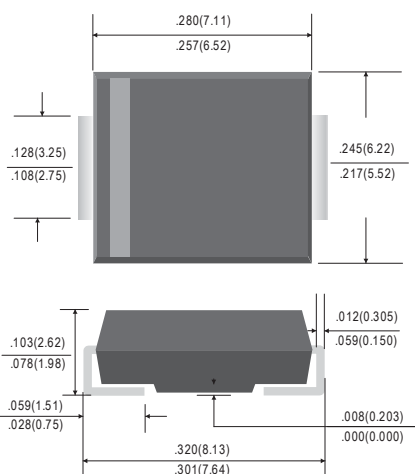
3.0 Amp Glass Passivated Super Fast Rectifiers - 50~1000Volts
SMC Package

SMC(DO-214AB)
Features

- Glass Passivated Chip
- Ideal for surface mounted applications
- Low leakage current
- Metallurgic ally bonded construction
- Moisture Sensitivity Level 1
- RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"

Mechanical Date

- Case: Molded Plastic, SMC(DO214AB)
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.009 ounce, 0.23 gram (Approximate)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

RATING		SYMBOLS	FM301	FM302	FM303	FM304	FM305	FM306	FM307	UNITS
Marking code			3C1	3C2	3C3	3C4	3C5	3C6	3C7	
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward rectifier Current 0.375" (9.5mm) Lead length at Fig.1		I _{F(AV)}	3.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	100							Amps
Maximum Instantaneous Forward Voltage at 3.0A DC		V _F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ Ta=25°C	I _R	5.0							μA
	@ Ta=100°C		100							
Typical Thermal Resistance (Note 2)		R _{θJA}	40							°C/W
		R _{θJC}	15							
Typical Junction Capacitance(Note 1)		C _J	60							pF
Operating and Storage Temperature Range		T _J ,T _{STG}	-55 ~ 150							°C

Notes:

1. Measured at 1MHz and applied reverse voltage of 4.0VDC.
2. Thermal Resistance junction to ambient, 10.0*10.0 mm² copper pads to each terminal.
Thermal Resistance junction to case, 10.0*10.0 mm² copper pads to each terminal.



RATING AND CHARACTERISTICS CURVES

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

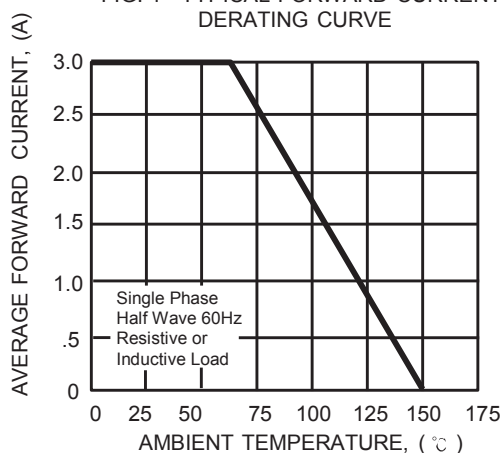


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

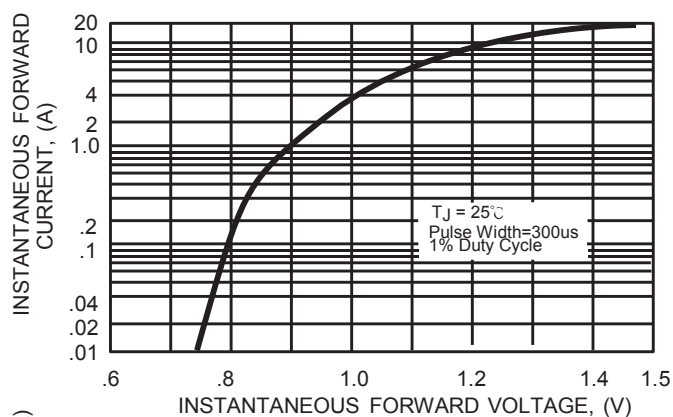


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

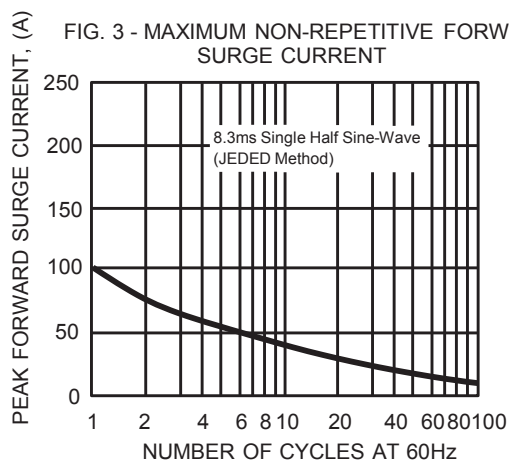


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

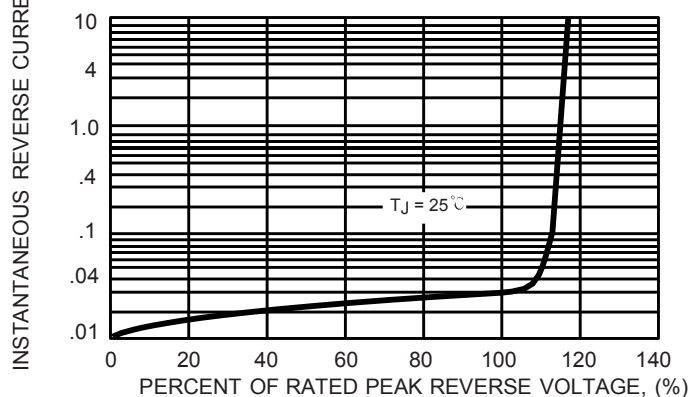


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

